ABSTRACT

A submersible energy storage device includes: a housing having an accommodation space therein; a cell stack in the housing; and an insulating fluid in the accommodation space, in which the cell stack is immersed, and configured to cool the cell stack, where the cell stack comprises a plurality of battery cells stacked in a stacking direction, and a cell spacer assembly provided between two adjacent battery cells among the plurality of battery cells, where the cell spacer assembly comprises a cooling plate having a first channel along a first direction of a plane perpendicular to the stacking direction of the plurality of battery cells and a second channel along a second direction of the plane, and where the first channel and the second channel are in fluid communication through a crossing position that connects the first channel and the second channel.

FIG. 4